

JGen

# SUBMIT AND ORCHESTRATE ALL YOUR SIMULATION JOBS AND WORKFLOWS IN ONE PLACE



Recurring tasks and processes in job handling are part of the daily routine of all CAE engineers. Job orchestration with JGen makes the process simpler and faster. This smart tool supports engineers with a reliable concept for automated job creation and execution in HPC workflows.

## Features

JGen supports the easy and fast job creation of CAE applications. It allows a flexible adaptation of jobs to the individual workflow. Simulation engineers can concentrate on their actual tasks again - and not on queues.

### Workflows

- Automated generation of jobs with complex dependencies
- Predefined code blocks speedup the creation of new workflows
- Use of external variables allow to parametrize workflows
- Significant boost in the efficiency of engineers
- Intuitive common interface, standardization, stress relief, speed for everyday work

### Hybrid + Cloud

- Control of on-premise and cloud resources by selecting the queuing system instance
- Efficient job submission from remote cloud data pools via client-server architecture
- The JGen framework development and testing process is already container-based
- Transparent integration of containerized applications is easily possible

### Broad support

- Integration of all relevant CAE solvers and several pre-configured applications
- At any time cloud compatible for AWS, Azure and Oracle
- Simple integration of Windows clients, Linux HPC environments and Web/Mobile
- Supports all common queuing systems such as LFS, PBSPro, UGE and SLURM

## Job Engine Automation

JGen reliably maps recurring process tasks and executes them automatically. Even in highly complex, heterogeneous IT landscapes with non-transparent dependencies of different batch jobs, JGen guarantees coordinated processing. JGen thus considerably reduces the effort of job creation - and significantly increases the productivity in the simulation processes.

## Benefits:

- Graphical- / Web interface / Command line
- Reliable and reproducible workflows
- Cost reduction by quality management interface
- Error handling
- Happy and efficient engineers